21 Hockings E-4,5 (1962-1977) 1980
AW50 Badaga AW50

> The hill people are so independent. . .that no temptation of wages will induce them to engage . . . as coolies. and they are only prevailed upon to work from a conviction that, refusing to do so, Government might make some just demands against them for increase of rent [land revenue]. . . .[4]

By the 1840s there were many Badaga families earning a certain amount during a few months of each year from townspeople, from plantations and perhaps from the new Mission (Ouchterlony, 1848, 64; Shortt & Ouchterlony, 1868, 64). Their economy was now monetized, though the majority of families were still dependent on farming for their food requirements.

EXPANSION OF THE MARKET ECONOMY (1850–1900)

During the second half of the nineteenth century far-reaching economic changes triggered by the British settlers introduced the concept of competition and the importance of valuation to the Badagas. There is little indication of any competitiveness in their indigenous exchange activities or bartering practices before about 1840.

The opening of coffee (1838) and tea (1846) plantations on the plateau called for a great deal of manual labour; and by the 1850s many Badaga men found themselves competing for the first time with immigrants in a labour market.[5] Each group constituted one-half of the work force (Grigg, 1880, 399), but the British estate owners now preferred Badaga workers to immigrants because of their diligence. The labourers were paid in cash, not grain.

Secondly, the sizeable European population on the hills was now requiring quantities of cabbage, carrot, potato and other European vegetables which some Badaga farmers were able to supply. Their tradition of intensive farming in small fields was readily adapted to the new crops (Shortt & Ouchterlony, 1868, 35); and their venture was helped by a climate not unlike that of northwestern Europe (an English poet later was to muse on 'the sweet, half-English Neilgherry air').

During the latter half of the century a wide variety of indigenous farm products also found their way into the local market.[6] These foodstuffs were local varieties of wheat and barley, Italian, finger and slender millet, prince's feather (or amaranth), mustard seed,

2: Hockings E-4,5 (1962-1977) 1980
AW50 Badaga AW50

241 coriander, chick pea (or Bengal gram), garlic, onion, fenugreek, as well as poultry and eggs. Though officially suppressed in 1854 and again by the Opium Act of 1878, opium continued to be produced (Ouchterlony, 1848, 27–28; Baikie, 1857, 92; Metz, 1864, 153; 'Geofry', 1881, 132; Benson, 1895, 432–433; Prince, 1908, 224).

177 241 Foodstuffs introduced by Europeans but now being grown by Badagas included:

Grains	*Root-crops*	*Vegetables*	*Fruits*	*Stimulants*
Barley (new variety)	Beetroot	Artichoke	Apple	Coffee
Fiorin grass	Carrot	Asparagus	Blackberry	Tea
Italian rye	Mangel-wurzel	Cabbage	Capers	Tobacco*
Lucern (for fodder)	Parsnip	Cauliflower	Citron	
Oats	Potato	Celery	Gooseberry	
Wheat (new variety)	Radish	French beans	Lemon	
	Turnip	Kidney beans	Loquat	
		Leek	Nectarine	
		Lettuce	Orange	
		Peas	Peach	
		Savoy cabbage	Pear	
		Sea kale	Plum	
		Spinach	Raspberry	
			Strawberry	
			Tomato	

*Reputedly a Toda import (Baikie, 1857, 95).

439 Trade items being imported to the Nilgiris in the late nineteenth century included four products also imported in pre-British times—sugar, salt, cotton cloth and tobacco. In addition various other Indian goods began to be imported only during the latter half of the century: almond, betel or areca, cattle, clarified butter, coconut, coriander and other spices, dried fruits, finger millet, furniture, gunpowder, Italian millet, lime, limes, oils, peas, poultry, salted fish, scrap metal, sheep, sulphur, toddy, tools, turmeric, wheat.

European articles imported to the Nilgiris in the later nineteenth century included wines, spirits, beer, clothing, candles, groceries, pottery, glass, hardware, shoes, books and stationery. It is unclear how much of these were destined for consumption by the European settlers.

Among the exports from the plateau at this time were some that had also been exported in pre-British days, namely opium, wheat

2: Hockings E-4,5 (1962-1977) 1980
AW50 Badaga AW50

and bees-wax. Other exports of the later nineteenth century were coffee, tea, potato, barley, resin, silk and hides.

AGRICULTURAL CHANGE OVER THE PAST CENTURY

Until 1863 the Badagas not only cultivated fields close to the villages but also practised shifting agriculture in the wooded areas. At that time the government abolished, at least formally, the system of swidden cultivation and thereby posed a serious threat to those Badaga farmers who had depended on it (for full details, see Grigg, 1880, 314-327). According to government experts swidden farming was wasteful of timber resources and led to soil erosion. More significantly, though, there was also an eagerness among British settlers to cover vast tracts of the Nilgiris with tea and coffee plantations. In 1863 the British abolished the revenue system current in the Kundena:du area,[7] which had involved issuing a licence for each hoe and each plough without otherwise taxing or delimiting the land a man could cultivate or recording what acreage he was entitled to use. Until these restrictions came into effect many Badaga farmers made periodic use of lands five to ten times as extensive as their revenue assessments justified.[8] By about 1880 these restrictions, legislated during 1862-1864, had become realities in all parts of the Nilgiris.

The rapidly increasing Badaga population was now faced with a depleted acreage of usable farmland, a situation that worsened with erosion and land sales. For the first time in history their fields, once surveyed and registered in accordance with the Land Settlement rules, came to have a monetary value—especially as under the Waste Land Rules a man's land could be auctioned and thus irretrievably lost if he became too much in arrears with the payment of land revenue. A farmer therefore tried to hold on to as much registered land as he could.[9]

The British land legislation did not cause an immediate shortage of land among the Badagas. On the contrary, Grigg notes (1880, 480) that in the 1870s land was so 'cheap' that the Badagas who did own some or bought more tried to cultivate areas that were too large for their resources, with the result that their labour and capital were spread too thinly across the land to produce adequate returns. The slim yield of soil not properly fertilized and skimpy cultivation of too large an area impelled the poorer farmers of the late nineteenth and early twentieth centuries to sell land to British

2: Hockings E-4,5 (1962-1977) 1980
AW50 Badaga AW50

are available for the total area under crop by Badagas.[14] In the case of the administrative 'village' of Sholur nevertheless good data (McIver & Stokes, 1883; Benson, 1884; Arputhanathan, 1953, 43; Subrahmanyam, 1962, 3–4) allow a realistic comparison with the recent situation (see Table 1). This 'village' (actually a commune) may be considered typical of Badaga settlements and has hardly changed its official boundaries since the Land Settlement of 1884.[15]

Table 1. *Sholur (So:lu:ru) 'Village': eighty years of agricultural change*

Total 'village' area, 1884	9113 hectares
Total 'village' area, 1961	9111 ha.
Registered *patta* lands, 1884	913 ha., all held by Badagas
Registered *patta* lands, 1962	1619 ha., nearly all held by Badagas
Number of *pattas*, 1884	49 single registrations, 63 joint ones (i.e., total of 112 *pattas)*
Number of *pattas*, 1962	372 in total
Population, 1881	1772, all communities, in 384 houses
Population, 1961	8518, all communities, in 930 houses
Estimate of cropped area, 1880–1881	749 ha.
Estimate of cropped area, 1962	607 ha.

From Table 1 evidence of several important shifts emerges:

A. In eighty years the population increased fivefold.

B. In eighty years the size of households doubled, from an average of 4.61 to an average of 9.15.[16]

C. In eighty years the number of registered land holdings *(pattas)* more than tripled.

D. In eighty years the area of *patta* land doubled through release of government-held reserves (but was not all cropped).

E. Fragmentation of holdings has thus been taking place.

F. The estimate of the total cultivated area in 1962 was a little below that for 1880–1881.

G. Average cultivated area has thus dropped from 0.42 ha. per capita in 1881 to 0.07 ha. per capita around 1961; in other words, only one-sixth as much cropped land is being used as there was in 1881 for each person.

We may conclude from the recent situation at Sholur (So:lu:ru)

2: Hockings E-4,5 (1962-1977) 1980
AW50 Badaga AW50

that agricultural production is hardly managed more efficiently today than it was nearly a century ago and that food production cannot have kept pace there with the vast increase in population.

Major changes in crop emphasis from the late 1800s to the present are best revealed by statistics [relating mainly to] Badaga cultivation. In 1875 there were 15,728 acres of Italian millet, 4,662 acres of little millet, 3,761 acres of barley, 3,430 acres of finger millet, 3,199 acres of wheat, only 754 acres of potatoes, 355 acres of mustard, 169 acres of vegetables, 144 acres of fenugreek, 67 acres of horse gram, . . . , and 66 acres of poppies grown on the Nilgiris (Grigg *et al.* 1880: xii). In 1895 Italian millet was still the leading crop, but potato acreage had risen to 2,032 acres. Poppies outlawed by the 1878 Opium Act were no longer grown (Benson 1895: 432–433). Little millet had become the most cultivated cereal in 1905, and finger millet was growing in importance (Francis 1908: 164). . . In 1914 there were about 4,000 acres with potatoes on the Nilgiris, but by 1920 potato acreage had doubled (Rao and Azariah 1953: 69). Before 1925 finger and little millets became the two important cereal crops, and remained the leading cereals from that time (Wood 1927: 210–223). Potato acreage has continually increased: by 1938 there were 12,000 acres, by 1950 almost 17,000 acres, and in 1960–61 there was a total of 20,600 acres in the main season and 2,400 acres in the lesser (Rao and Azariah 1953: 69; Krishnamurthi 1953: 193) . . . (Noble, 1968, 133–134).

Some official figures can be presented[17] to further illustrate the shift in importance of various crops on the entire plateau from 1905 to 1940 (see Table 2). These figures (which come from two distinct sources—Francis, 1908, 164; Madras 1949, 976), show the percentage of the total cultivated area devoted to each crop.

It may be noticed that while the figures for each *taluk* in 1905–1906 total 100%, those for 1940–1941 exceed 100%. This discrepancy reflects one important change in the thirty-five year period: mixed cropping became a fairly common practice. Thus two crops represented in Table 2 by separate figures would sometimes be growing simultaneously on the same piece of land.

There were very slight changes in the crop pattern for wheat, barley, finger millet and spices. A small area of pulses appeared only in the later figures (though pulses had in fact been grown in

2: Hockings E-4,5 (1962-1977) 1980
AW50 Badaga AW50

178
241

Table 2. *The Nilgiri Plateau: Cropping change, 1905–1940**

	Percentage of total cropped area			
	Coonoor Taluk (Poranga:du and Me:kuna:du)		*Ootacamund Taluk (Todana:du and Kundena:du)*	
	1905–1906	*1940–1941*	*1905–1906*	*1940–1941*
Mainly subsistence crops:				
Wheat	1.7%	2.8%	2.9%	3.3%
Barley	5.1%	2.7%	3.4%	4.2%
Finger millet	1.5%	1.9%	7.1%	4.5%
Slender millet	14.7%	6.3%	4.3%	6.2%
Other grains	13.1%	0.7%	27.8%	1.1%
Pulses	—	1.9%	—	0.5%
Cash crops:				
Vegetables (mainly potato) and fruits	5.2% (potato: 4.8%)	18.6% (potato: 3.2%)	3.9% —	30.3% —
Spices, condiments	0.3%	0.7%	0.9%	1.1%
Coffee	44.6%	25.6%	18.1%	15.3%
Tea	7.7%	42.7%	12.8%	32.3%
Cinchona	1.1%	0.8%	10.9%	4.0%
Miscellaneous 'industrial plants'	4.7%	5.9%	7.9%	6.6%

*All percentages are based on acreage.

the nineteenth century). As malaria became less of a problem and cures other than quinine appeared in India cinchona decreased in importance, but this was mainly on British-owned plantations. Miscellaneous 'industrial' plants, primarily eucalyptus, maintained a stable acreage. These slight fluctuations tell us very little, but others are much greater and more illuminating. The various millets lost much of their significance for Badagas even though these had previously been among their traditional staples. The land was planted with potatoes instead—especially after the start of the First World War. There were about 1600 hectares under potato cultivation on the plateau in 1914, and as we have seen by 1920 this figure had doubled (Hanumantha Rao & Azariah, 1953, 69). In the thirty-five year period spanned by Table 2 potatoes, together with some other quite minor vegetables, increased their acreage some five- or six-fold. Badagas did not eat much potato: clearly they sacrificed most of the acreage traditionally devoted to

(433)

2: Hockings E-4,5 (1962-1977) 1980
AW50 Badaga AW50

staple grains to grow marketable vegetables for cash instead.[18] Whether their diet had improved is not clear. By the Second World War a mere 3% of the entire Nilgiri population subsisted primarily on millets; the other 97% depended on purchased rice (Krishnaswami, 1947, 464). Coffee was not a successful crop in most parts of the plateau, and much of that plantation land was later given over to tea. This, together with the development of Badaga tea plantations from about 1925 onward, accounts for the great increase in tea acreage over the thirty-five year period covered in Table 2 (Ranga, 1934, 18–22).

The plantation crops called for more expertise than Badagas could usually muster and so were mostly confined to European land-holdings; even so, some Badagas were growing tea and a little coffee in the late 1920s (Ranga, 1934, 2). But potato was relatively easy to cultivate, especially as a government farm in the district helped them with seed, fertilizers and technical advice. During the past fifty years some of the more enterprising Badagas (mainly those able to obtain financial credit) have successfully cultivated tea and coffee on estates both large and small, though this was initially a ruse of theirs to increase the value of their land before selling it to Europeans.[19]

Chemical fertilizers were first used sporadically in the early 1920s; before that only cow-dung and human refuse had been available (Shortt & Ouchterlony, 1868, 44; Grigg, 1880, 468; Ranga, 1934, 14). These chemicals led to much higher yields in the European vegetable crops and helped confirm the belief that growing food for the market was a profitable occupation. Improved seeds, notably potato, and insecticides were also adopted by the Badagas (Nambiar, 1965, 23), who were 'always willing to test any new method of cultivation, or new crops brought to their notice by the Nilgiri Horticultural Society' (Thurston, 1909, vol. I, 76, quoting from *Pioneer*, 4 Oct. 1907).

The adoption of fertilizer, insecticide and good seed was soon followed by construction of more terraces on some of the sloping fields. Progress in terracing, however, was much slower than the adoption of other innovations because it demanded a greater capital outlay than many farmers could afford; and most did not possess more than a quarter-hectare of land. Even today some cultivated slopes that badly need terracing because of soil erosion remain unterraced. It is worth noting that in the past several decades the situation has much improved because of the state

increasingly valuable to the Badagas because of rising grain prices (Mandelbaum, 1955, 240).

For many Badagas with small land-holdings the transitional period between the two World Wars was marked by the frustrations of indebtedness. Pieces of their land were sometimes sold to non-Badagas in order to pay off outstanding debts—a previously inconceivable practice. Some men went as far as the Annamalai Hills for manual labouring. Badaga debtors did, however, work hard to produce profitable cash crops or at least to buy back some of their former lands (Thurston, 1909, vol. I, 64; Ranga, 1934, 4; Vivekanandam Pillai, 1937, 249).

With the First World War, major changes in their marketing practices became apparent. Tea, coffee and cinchona, like potato, presuppose a market beyond the Nilgiris, which in turn presupposes adequate transportation. The crucial demand for vegetables to feed the numerous European troops in India, Burma, Malaya and Ceylon stimulated the change in crops documented above (see Table 2). Similar conditions arose again in the Second World War and prompted many more Badagas to try commercial farming. On each occasion cultivators took the risk of exporting potatoes and other vegetables to new and remote markets, and some made handsome profits (Francis, 1908, 167). The risks in this enterprise were real, for men could recall occasions when floods broke the road or rail connections or the goods reached their destination only after market prices had fallen heavily. The rewards of potato cultivation were, however, of critical importance in lifting the yoke of indebtedness: during World War II the British made a great deal of capital available to Badaga farmers, as part of the 'Grow More Food' campaign. This finance and the profits from selling their highly priced potatoes did more than any cooperative loan facility to relieve the indebtedness that Badagas had been suffering under for several decades.

While tea and coffee yield a higher profit per hectare than potatoes or grains, they are more susceptible to disease than the millets and require greater agricultural skill than all other Nilgiri crops if they are to attain the standards required by wholesale purchasing agents. Moreover they need to be produced in large enough quantity to warrant the processing and transportation to Bombay (since 1940, to Cochin). Middlemen, both Badagas and others, were therefore indispensable to the few Badaga tea and coffee growers of the 1920s and 1930s. Middlemen could act as a

2: Hockings E-4,5 (1962-1977) 1980
AW50 Badaga AW50

By now the Badaga Christians were viewed as a separate caste, and the old antagonism over Christian conversion had given place to a new realism which accepted the British, tolerated their religion and sought to collaborate with them in the realms of commerce and administration. The periodic massacres of Kurumbas had also come to an end.

Land fragmentation and indebtedness continued to be problems for the twentieth-century farmer, but new techniques of commercial cultivation raised the per capita income appreciably. Chemical fertilizers and insecticides were now used, along with good seed and reputable tea cuttings. Money-lenders, middlemen and truckers all appeared on the scene to answer local needs. Most of the hillsides were terraced to permit efficient farming, and the emergence of co-operative societies from 1911 helped with this as well as with the more general problem of rural credit.

These new directions in the farm economy were fully in evidence by 1930, at which time most Badagas broke off their time-honoured exchange relationship with the Kotas, Todas and Kurumbas and began to seek the artifacts these tribesmen had made in town markets instead. The ostensible reasons for this break are several. Badagas usually mention the increasing cost of having a Kota band at their ceremonies; while Kotas mention an insulting article in a national newspaper of 1928, 'The Hindu', which implied that Kotas were descended from the unions of Todas with Badagas.[3] A glance at the population graph in Appendix 2, however, will make it clear that the over-riding reason for the break must have been the disproportionately large number of Badagas. By 1931 there were 42,500 of them, too many to be adequately supplied in the customary way by a few hundred Todas and Kotas.

The Second World War brought a further surge in the demand for potatoes to feed the European troops stationed throughout south and southeast Asia; at the same time government financing helped the growers, with the result that this new capital and the high prices potatoes were fetching greatly alleviated the former indebtedness of Badagas. After 1957 potato production fell sharply with a series of disease-ridden crops, and tea, first planted by Badagas some thirty years before, now became a popular cash-crop too. By 1970 cabbage had also become an important crop.

Modern Badagas enjoy a high standard of living, occupy comfortable tiled houses, send their sons to college, make frequent

4: Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

128 curable illnesses is described (Chapters 5-8). Some emphasis is placed on reproduction and sexuality (Chapters 3 and 4), because reproductive success is the ultimate test of any society's adaptation to its environment. The role of the therapist and associated specialists, and their relations with their clients, is an extremely critical factor in the maintenance of a folk medical system. Equally important to the propagation of this knowledge is the recruitment of apprentices and the relationships they develop with a therapist (Chapter 10). Care of the living body and the advent of death receive some consideration (Chapters 2 and 9). Finally, this study may be of particular interest to pharmacologists because it identifies each of the substances used in every medicament described (Chapters 4-7).

182 Differential interaction between Badagas and their environment — an environment which does of course include disease organisms — has over some 20 generations led to a survival of the healthier individuals, a higher fertility, and in general a steady expansion of their occupancy of the Nilgiri Massif, beginning with the founding of Tu:ne:ri village in the sixteenth century on the arrival of a few dozen refugees, and culminating in the very large and prosperous population of today (Diagram 1). The medical ethnography which follows will attempt to delineate the important factors in their adaptation.

Introducing the Badagas

101 1.2. The Badagas are a community of Hindu peasants who numbered 161 104,919 people in the official census of 1971. They live almost en- 131 tirely on the Nilgiri Massif, which is in the westernmost corner of Tamil Nadu State, India, some 11°N from the Equator. The great 241 majority of them are potato, cabbage and tea cultivators, but until 433 the early years of this century they were farming such subsistence crops as barley, wheat, and several millets. The fields surround their villages and farms. They rarely irrigate, but rely instead on the two 233 regular monsoons. Some people also keep herds of buffalo and cattle for milk and other dairy products, but not for meat.

361 Their long rows of brick houses lie along the leeward slopes of the hills, and are thus protected from the worst of the rains. In every 368 village there are also temples or shrines to various Hindu gods. 791 Badagas are nearly all Hindus of Saivite persuasion; two small but significant minorities are the Lingayats and the Christians.

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

As an increasingly heavy work-load was placed on the therapists more women entered the craft; and more reliance was placed on Western medicine too. Today the scientific medicine of the public health department, and of government and mission hospitals, is making serious assaults on the faith that Badagas formerly had in their own herbal therapy, and is helping the population to expand at what must be considered an alarming rate (Diagram 1). The traditional therapy was adaptive, indeed crucial, for ancient Badagas trying to gain a foothold in a strange environ-

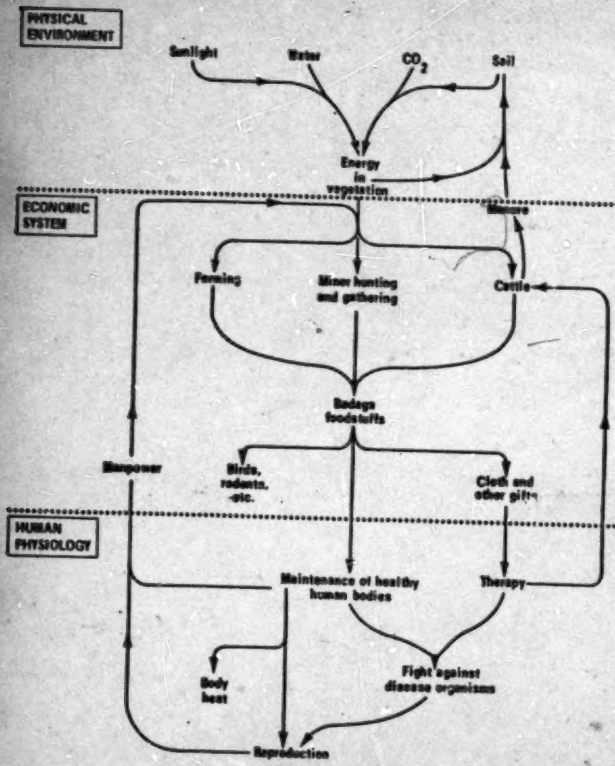

Diagram 2 : A simple model for energy flow in the Badaga ecological system

175 (Grigg 1880: 228, 268-69). Whatever the details of their migration may be, it is
(167) known that no further Badagas arrived from Mysore after the first English report mentioning the Nilgiri peoples (Buchanan 1807: 246-47). They have been consolidated as a community for at least two centuries (Anonymous 1819: liv-lv; Macpherson 1820: lix; Ward 1821: lxx-lxxi). Furthermore the system of socio-
178 cultural interdependence which linked the Badagas with the other tribal groups there at the beginning of the 20th Century did not differ greatly from the situation as it was sketchily recorded in 1603 (Fenicio 1603: 723). In general therefore we
101 177 can say that the Badagas were Kanarese-speaking agriculturists who settled in the Nilgiris from perhaps six until two centuries ago, and who were there consolidated into a tribe-like community interacting with the other local tribes.

• 433 Records indicate that until about 1860 or 1870 the Badagas were slash-and-burn cultivators as well as settled farmers (cf. Grigg 1880: 315-17, 321; Francis 1908: 4; Thurston 1909: I, 78-79). Those who ate meat were also in the habit of hunting, until some 30 years ago. After 1860 the British administration
241 (657) wanted the peasants to remain on the same tracts of farmland; whereupon they gradually took to cultivating European vegetables, particularly the potato, which
241 439 they sold for cash in the town markets (Metz 1864: 153-54). Since 1957 a series of crop failures caused by a potato disease has prompted the Badagas to turn more and more to the cultivation of tea and coffee, products which are also sold locally for cash. In the past the food needs of these villagers have been satisfied by the cultivation of millets; but since about 1920 it has been more common for them to purchase rice as a staple, using money brought in by the potato, tea or coffee sales (Ranga 1934: 68).

262 000 Dairy produce is an essential part of the Badaga diet. Nearly every

615 phratries, however -- which they rank in various orders to create a kind of caste hierarchy. One widely accepted view ranks the various groups of Badagas in this descending order:

1) Wodeyas, an orthodox Lingayat phratry;

2) Haruvas, sometimes called Badaga Brahmins;

3) Lingayats (exclusive of Wodeya Lingayats);

4) Kaggusis, a small vegetarian group;

5) Gaudas, more commonly called "Badagas" because they make up the vast majority of the entire Badaga community;

6) Kumbaras;

7) Bedas;

8) Toreyas.

184 (615) •433 361 Visible cultural differences between the various groups of Badagas are very slight. All Badagas are basically agriculturists who also keep a few cattle; all live in villages made up of rows of houses running in parallel lines across the sheltered slopes of a hill (Thurston 1909: I, 75; Ranga 1934: 1, 5; Vivekanandam Pillai 1937: 246); all are subject to the same indigenous politico-legal system; all maintain the same kind of interdependence with the other Nilgiri tribes. Although the endogamy of some of these groups might tempt us to call them jatis, and although some kind of a caste hierarchy is discernible, they are unlike the multi-caste villages of the plains in that there is no economic specialization to distinguish each group, there are no "caste" councils, and it is very exceptional for members of more than one of these groups to inhabit the same hamlet.

CHAPTER II

THE BADAGAS IN NILGIRI SOCIETY

The Interdependence of Nilgiri Communities

Until about the year 1913 the Badagas were as intimately involved in the traditional system of economic and ritual interaction of the Nilgiris as were the other main participants, the Todas, Kotas and Kurumbas. Throughout the whole of the 19th Century, from the first lengthy description of the Badagas (Keys 1813) until Father Tignous' account (1911), there seems to have been no essential change in the organization of this complex relationship; but after the First World War the Badagas tended to withdraw more and more from the obligations and privileges which had traditionally been theirs. What then were these obligations and privileges? How complex were they?

Each of the four groups was linked with each of the others through patrilineally inherited partnerships. The men involved in these supplied each other with traditional goods and services which supplemented their own economic production, and also symbolized their social interrelationship through ritual interaction.

Only the Badagas produced a real surplus of grains; Kotas and Kurumbas grew hardly enough crops for their own needs, and Todas grew nothing whatsoever. Thus the Badagas were obliged to dole out grain to Todas, Kotas and Kurumbas

CHAPTER VI

SOCIO-CULTURAL CHANGE IN THE TWENTIETH CENTURY

121 In this and the chapter which follows we shall be concerned with the socio-cultural changes that have occurred in the period since 1913 (the year we have chosen as marking the break between the traditional and the monetary economy).

Agriculture

175 433 Until around 1860-65 the Badagas not only cultivated fields lying close to the hamlets, but also practiced shifting slash-and-burn cultivation in the wooded areas (Grigg 1880: 321). After the British land settlement of 1881-1884 this practice was completely stopped. By the year 1913 most Badaga households were cultivating their own land within a mile of their homes. The land was generally hilly and always unirrigated. The best fields lay in the valley flats, not so much because of the proximity of stream-water as because there was rich top-soil on these flats. Badagas recognized these differences in soils and terrain, both when choosing where to plant their crops and when dividing up the paternal inheritance. Soil distinctions were important, but distance from the hamlet could be yet more significant. Lands were therefore categorized by Badagas primarily as being close to the hamlet (within $\frac{1}{4}$ mile), distant from it, or in jungle clearings (Francis 1908: 165; Ranga 1934: 11-14). The first type of land received much of the cattle manure and all of the human refuse; the more distant land received little manure of any des-

241 311 242 241

5: Hockings E-5 (1962-1963) 1989
AN50 Badaga AN50

121 sification of the rural economy. This was especially true in those villages where much of the land had to remain "dry" because it could not be reached by the irrigation system. The change to a cash crop integrated what had been relatively isolated villages into the regional economy; previously they had been more economically self-sufficient. The increased range of economic relations, Epstein claims (1962: 315), was associated with a diminution of traditional economic ties within one village: farmers thought it expedient to save capital by ceasing to give customary dues to their clients. This was not simply a matter of withholding what the clients were entitled to, however, for it released them from traditional obligations and allowed them to seek better employment in the regional economy. Of the two villages studied by Epstein, the irrigated one changed its internal economic relations less than the "dry" village did. Irrigation boosted production without very much altering the traditional economic differentiation that separated farmers and their clients. By comparison, the "dry" village was obliged to diversify its economy much more, and as a result its integration with the regional economy went much further; economic relationships within that village were altered very radically.

433 621 121 Diversification of the economy has also occurred in Badaga hamlets during the last few decades. Indeed, the most affluent and tension-free hamlets today are the ones with the most diversified economies: tea, coffee, market vegetables, eucalyptus oil and poultry are all produced in certain hamlets, and ensure a steady income there even if one or two of the items are ruined by disease or weather in any particular year. At the same time we note that in the Nilgiris the economically more "progressive" Badagas (a great majority of the community) have severed all or most of their ties with Kotas, Todas and Kurumbas, just as the more "progressive" farmers near Mandya have severed ties with their traditional clients and

121 178 184 648

6: Noble K-4,5 (1962-1963) 1989
(1800-1963)

AW50 Badaga AW50
Irula AW53
Kota AW55
Toda AW60
Madras Tribes AW63
Kasuva

T
342
433
front-gabled, and conical huts, combined with a religious-economic system based upon buffalo herding.

Badagas on the upper Nilgiris reside in side-gabled houses built into rows, in which there are also temples similar to houses. During the 1800s the Thoraiyas assisted these Badagas in the production of subsistence millets and condiments or opium for sale. Badagas residing in the Nilgiri Wynaad occupy hipped-roof houses and cultivate wet rice with the assistance of Paniyas. Some upper Nilgiri Badagas seasonally herd livestock on western upper Nilgiri grasslands and reside in assorted huts while there. In the Mysore Ditch an economic liaison between upper Nilgiri Badagas and Kasuvas has led to the herding of Badaga livestock by Kasuvas. The Kasuvas occupy distinctive side-gabled dwellings within permanent livestock centers.

B
342
433

Ka
342
433

There have been similarities between the dwellings and agriculture of the upper Nilgiri Badagas and Kotas since the early 1800s. However, in contrast to Badagas, Kotas have front-gabled temples not built into house-rows. They also vary from Badagas by being basket makers, blacksmiths, carpenters, musicians, and potters. The Nilgiri Wynaad Kotas, who reside in Government-built houses within an expanding urban center, grow wet rice and continue the traditional trades.

Ko
342
433
[463]

Irulas occupying eastern Nilgiri slopes live in side-gabled houses within rows and maintain separate distinctive memorial-temples. In the early 1800s they were partially supported by garden produce and millets, but seasonally depended upon hunting and the gathering of yams.

I
342
433
[175]

6: Noble K-4,5 (1962-1963) 1989
(1800-1963)
AW50 Badaga AW50
Toda AW60

T 174 Todas had apparently stopped hunting game by historic times. If they were part-time hunters when first arriving on the upper T 136 Nilgiris, they would have found game in abundance. Among the game animals are two deer, muntjac (Muntiacus muntjak Zimm.), sambar (Rusa unicolor Kerr.), and a wild goat, the Nilgiri tahr (Hemitragus hylocrius Blyth). Gaurs (Bibos gaurus H. Smith) from lower Nilgiri slopes and adjacent lowlands once periodically ascended to higher elevations, but no longer do so.[8]

T 175 294 Harkness (1832: 15) observed Toda women stitching edges of cloths to be used for clothing, so needlework among the women is not something taught them by missionaries. However, missionaries have done much to encourage embroidery among the women. The Church of 294 297 South India, Ootacamund, provides cloth and thread to Toda women, who 434 receive a portion of the proceeds from embroidered cloth sales. The 439 Madras Government has also established stores to sell products made T by Todas and other tribals. Some Todas have become salaried employees 463 performing such tasks as gardening or forest watching. One is an M97 educated evangelist working for the Seventh Day Adventist Mission in T Coonoor, and another is a nurse trained in England. An income source 434 for a few Toda families is the money paid by tourists visiting the 457 more accessible hamlets.

2. Badaga and Kasuva Pastoralists

B 361 By taking advantage of temperate grasslands, Badagas were able to establish a dairy-temple center at Bergani and elsewhere practice B 433 transhumance like the Todas. They have also made economic gains by (648)

(433) employing Kasuvas and exploiting the grazing potentials offered by
(648) tropical savanna woodlands, bamboo thickets, thorny thickets, and related savannas of the Mysore Ditch.

(234) (778) (716) (782) (346) The Bergani dairy-temple center. A sacred buffalo herd is maintained at the Bergani dairy-temple center honoring the goddess Masthi Mothai. At the center there is a building with an inner dairy-temple, priest's quarters, and rooms to shelter buffalo calves (Plate III, A). Several buffalo-pens stand close by. Down slope there is another building where pilgrims may sleep. Inside it is a sacred (778) (782) (793) (788) room where an employed Chetti annually weaves new clothing for the goddess's image and the attendant priest. Food for hundreds of pilgrims who attend an annual festival is cooked in a nearby shed with aligned fireplaces.

(234) (778) (731) (648) Features inside the dairy-temple are identically related to the arrangement of features within Badaga row temples described in a later chapter. The dairy-temple center and a herd of over 70 buffaloes are supported through monetary gifts and buffaloes donated by devotees. Todas sometimes give buffaloes. Most gift buffaloes are garlanded and presented to the priest during a week preceding the festival honoring the goddess. The young priest, who may serve for a year or more, looks (234) (778) (793) after the sacred buffaloes and processes their milk inside the dairy-temple. He never returns to secular life during his term in office, and must give up the priesthood on Masthi Mothai's Monday if he starts dreaming about girls or wishes to get married. The youth milks sacred buffaloes in the morning and evening, takes buffaloes to and from

6: Noble Kr4,5 (1962-1963) 1989
(1800-1963)
AW50 Badaga AW50
Kota AW55

CHAPTER V

BADAGAS AND KOTAS OF THE UPPER NILGIRIS

Ko 174

Kotas may once have served as artisans to ancient Nilgiri members of the Megalithic Cult. Racial and linguistic evidence indicates that they were living on the Nilgiris before the Badagas arrived. Furthermore, Kotas maintain that Badagas ascended the Nilgiris after them and received aid from Kotas when they came. Thus, at first there may have been economic ties between lower ranked Kota agricultural artisans and pastoral Todas. After the Hindu and caste-affiliated Saivite Badagas settled on the Nilgiris, they probably exerted a steering effect on the development of caste-like relationships among the different Nilgiri ethnic groups.

B 121

Although the five Nilgiri ethnic groups have remained culturally distinctive, each must have influenced the others to varying degrees through diffusion of ideas. As a probable result, members of all three upper Nilgiri groups and the Irulas live in nucleated communities, and Kurumbas and Wynaad Badagas tend to do so. To varying degrees, members of all five groups build their dwellings in rows. When the functional arrangement of features within Toda, Kota, and Badaga dwellings are compared, the similarities are too great to preclude exchange of ideas. Because of combined temperate environmental and similar cultural influences, Badaga and Kota occupance patterns were in many ways similar during the early 1800s. They practiced shifting slash-burn agriculture, used plows, subsisted on millets

B Ko 433

6: Noble K-4,5 (1962-1963) 1989
(1800-1963)
AW50 Badaga AW50
Kota AW55

B Ko 433 [241]

and other cereals, and probably from their kitchen gardens obtained most produce which was bartered or sold. In the later part of the last century shifting slash-burn agriculture was legally abolished. During this century the Badagas and Kotas abandoned the use of plows and turned to commercial potato production. Economic differentiation between the two groups is based mainly on the fact that Kotas have been partially supported by basketry, blacksmithing, carpentry, hide curing, pot making, and the playing of music. These supplementary activities of the Kotas, practiced to varying degrees by other Indian groups, are commonly associated with low social ranking.

1. The Badagas

B 961 [175] [311] B [342] B 243 [351] [361] B 241 [361]

Occupance pattern. Most Badaga hamlets and villages are located above 6,000 feet and east of the grasslands inhabited mainly by Todas (Figure 2). Harkness' description of Nanjanad before 1832 indicates that the basic Badaga occupance pattern remains unchanged. There was cultivated land around the village, and cattle grazed on nearby grasslands. Houses aligned horizontally into two house-rows on a hill side had joined front porches facing the down slope. A flat courtyard before each house-row was used to hand-thresh and dry grain in the sun. Both courtyards were edged on the outside by low stone walls. At one end of the village there was a compacted circle on which cattle trod out grain, and at the other end there were several cattle enclosures (Harkness 1832: 36-37). Badaga farmers continue to live together in communities, and they cultivate nearby kitchen gardens plus near to distant dry fields (Plate X, A). Coffee, tea, and multilayer gardens

241 (311) (433) (439) of 20,600 acres in the main season and 2,400 acres in the lesser (Rao and Azariah 1953: 69; Krishnamurthi 1953: 193; Madras Department of Agriculture 1960-61: single page). The production of the 1960-61 potato crop was approximately 61,900 tons and 7,060 tons. Most potatoes are shipped to Bombay, Calcutta, Madras, and other parts of India via Mettupalaiyam city at the base of the Nilgiris (Figure 1).

175 241 439 Despite increased potato production on dry fields and the eating of imported rice by Badagas, most early 1800 cereals continue to be cultivated on dry fields. Cereals raised mainly for home consumption also enter local markets. Produce from old commercial plants, excluding poppies, is still sold locally and on the plains. These plants are grown with "English" vegetables in kitchen gardens. Apart from potatoes, other "English" vegetables (Table III)--cabbages and carrots for example--are sometimes raised as dry field crops. Fruit 175 245 trees originating from nectarine, peach, and plum plants introduced before 1836 (Table III) and Chinese pears introduced in 1846 (Price 1908: 125) are grown in Badaga orchards. Mandarin oranges grown in 439 multilayer gardens are also of some commercial importance. Badagas have taken advantage of ready markets for fruit and "English" vegetables. Since completion of the railroad to Ootacamund in 1908, European and Indian families scattered over India have purchased, through agents, baskets of fruit and "English" vegetables sent out at periodic intervals from the Nilgiris. On market days produce from Badaga landholdings is displayed and sold in the Coonoor, Kotagiri, (245) Ootacamund, and smaller markets. A few Badagas use their kitchen gardens to grow introduced berries (Table III), and strawberries in

439 particular are sold by vendors who wait near entrances into the main [245] stores in Coonoor, Kotagiri, and Ootacamund.

Long after the introduction of tea before 1836 (Table III) and 245 coffee in 1838 (Athrey 1953: 11), enterprising Badagas turned to coffee (175) and tea planting. Ranga (1934: 19-21) recorded these facts concerning [433] their earlier tea planting: During a single week in 1928 a European [439] planter purchased 17,000 pounds of green tea leaf from Badagas. Be- (311) tween 1928 and 1930 Badagas in four communities increased their tea acreages to approximately 400 acres. By 1934 a Badaga woman managed a tea nursery, and a Kotagiri tea planter was purchasing all the tea leaf he could obtain from Badagas. In the 1960 Planting Directory over 100 Badagas are listed as coffee and tea growers. Their holdings range in size from six acres of tea to a tea garden with 190 acres of tea and a factory or from 15 acres of coffee to a garden with 158 acres of arabica coffee and 59 acres of tea (United Planters Association of Southern India 1960: 38-81). According to the tentative definition of a plantation used in this study (Appendix A), the two largest gardens would qualify as plantations--and are the only listed Badaga holdings with such large dimensions. Tea leaf from many listed and a much larger number of smaller unlisted holdings is processed in nearby company factories, or in small factories owned by Badagas or Lingayats.

Acacia and eucalyptus trees were first grown on the Nilgiris before 1836 (Table III). Badagas have since planted many acacias and eucalypti on land in and between their communities. From these trees are obtained acacia bark for tannin, eucalyptus oil, and firewood.